NISTTech

Mouse Cell Line Authentication

Tools for authenticating cell lines are critical for quality control in cell-based biological experiments. Currently there are methods to authenticate human cell lines using short tandem repeat (STR) markers based on the technology and procedures successfully used in the forensic community for human identification, but there are no STR based methods for authenticating nonhuman cell lines to date. There is significant homology between the human and vervet monkey genome and we utilized these similarities to design the first multiplex assay based on human STR markers for vervet cell line identification.

Abstract

Tools for authenticating cell lines are critical for quality control in cell-based biological experiments. Currently there are methods to authenticate human cell lines using short tandem repeat (STR) markers based on the technology and procedures successfully used in the forensic community for human identification, but there are no STR based methods for authenticating nonhuman cell lines to date. There is significant homology between the human and vervet monkey genome and we utilized these similarities to design the first multiplex assay based on human STR markers for vervet cell line identification.

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References

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Status of Availability

This technology is available for licensing non-exclusively.

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